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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,698	08/25/2006	Darren Kidney	P30345	4508
7055 7590 11/23/2010 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER				
BELLINGER, JASON R				
ART UNIT		PAPER NUMBER		
3617				
NOTIFICATION DATE		DELIVERY MODE		
11/23/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

### Office Action Summary

**Application No.**

10/590,698

**Applicant(s)**

KIDNEY, DARREN

**Examiner**

JASON R. BELLINGER

**Art Unit**

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2010.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-37 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 13-37 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/C)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 is indefinite due to the fact that it is unclear how an end of the limb "points away" from the central annular body; or how the sealing elements "project from" the radially inwardly pointing surface of the limbs. No directional indicators (i.e. radially, axially, etc.) have been provided to clearly define this limitation.

Claim 14 is indefinite due to the fact that it is unclear what element of the invention is used as a base or datum point for the limitation that the sealing elements "project by a same amount" from the radially inwardly pointing surface.

Claims 30 and 37 are indefinite due to the fact that it is unclear how the inner surface of the flexible members "extends" to the cylindrical inner face; or how the sealing elements are "projecting from" the inner surface "toward" the rim. No directional indicators (i.e. radially, axially, etc.) have been provided to clearly define this limitation.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 13-14, 16-17, 22-23, 25-26, 29-31, and 35-37 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yokohama (JP 32-5354). Figure 4 of Yokohama shows a sealing ring 1 for a wheel having all of the limitations as set forth in the above claims.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokohama (JP 32-5354). Yokohama does not appear to show the free ends of the sealing lips being rounded, nor the bottoms of the grooves being rounded. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the free ends of the sealing lips and the bottoms of the grooves with rounded shapes, dependent upon the type of manufacturing process used to create the sealing ring, and further to prevent the free ends of the sealing lips from damaging the bead of the tire during installation and/or use.

7. Claims 18-19, 21, 24, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokohama (JP 32-5354) as applied to claims 13-14, 16-17, 22-23, 25-26, 29-31, and 35-37 above, and further in view of Veux et al. Yokohama does not show the sealing ring 1 including a reinforcing member formed on the central annular body. In Figure 7, Veux et al teaches the use of a sealing ring having a reinforcing member 70 formed on a central body portion. This reinforcing member 70 is a radial elevation or rib on the radially outer side of the body. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sealing ring 1 of Yokohama with a rib, for the purpose of providing reinforcement to the sealing ring.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokohama (JP 32-5354) in view of Veux et al as applied to claims 18-19, 21, 24, and 27-28 above, and in further view of Medynski. Yokohama as modified by Veux et al does not show a hollow space provided in the reinforcing member. Medynski teaches the use of a sealing ring 10 having a reinforcing member 15-16 with a hollow space therein. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rib of the sealing ring of Yokohama as modified by Veux et al with a hollow space, for the purpose of reducing the weight of the ring without sacrificing strength or resiliency.

9. Claims 13-17, 22-23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 787,784 (hereafter Dunlop) in view of DE 1,021,738.

As best understood, the Dunlop reference shows a sealing ring for a wheel having all of the structure as set forth in the above claims, except as follows:

The Dunlop reference does not specify the dimensions of the sealing ring 5 with respect to the tire beads 3. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the sealing ring of the reference with dimensions suitable to properly function when inserted into a wheel assembly, i.e. sealing the tire against the rim.

The Dunlop reference does not specify that the deformable sealing elements (adjacent grooves 7) project from an inner surface of the flexible limbs. The German reference teaches the use of sealing elements that project from a surface of a sealing ring 4. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the deformable sealing elements of the Dunlop reference as a projection from the inner surface of the flexible limbs as an alternative configuration, in order to increase the sealing effect of the sealing ring by allowing more surface area of the sealing elements to contact the tire beads when installed.

While the Dunlop reference as modified by the German reference does not show the grooves between the sealing elements being rounded or the free ends of the sealing elements being rounded, it would have been obvious to one of ordinary skill in the art at

the time of the invention to form the grooves and free ends in any shape, dependent upon the manufacturing process used, and the aesthetic appearance desired.

10. Claims 18-19, 21, 24, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 787,784 (hereafter Dunlop) in view of DE 1,021,738 as applied to claims 13-17, 22-23, and 26 above, and further in view of Veux et al. The Dunlop reference as modified by the German reference does not show the sealing ring 5 including a reinforcing member formed on the central annular body. In Figure 7, Veux et al teaches the use of a sealing ring having a reinforcing member 70 formed on a central body portion. This reinforcing member 70 is a radial elevation or rib on the radially outer side of the body. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sealing ring 5 of the Dunlop reference as modified by the German reference with a rib, for the purpose of providing reinforcement to the sealing ring.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB 787,784 (hereafter Dunlop) in view of DE 1,021,738 and Veux et al as applied to claims 18-19, 21, 24, 27-28 above, and further in view of Medynski. The Dunlop reference as modified by the German reference and Veux et al does not show a hollow space provided in the reinforcing member. Medynski teaches the use of a sealing ring 10 having a reinforcing member 15-16 with a hollow space therein. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the

invention to provide the rib of the sealing ring of the Dunlop reference as modified by the German reference and Veux et al with a hollow space, for the purpose of reducing the weight of the ring without sacrificing strength or resiliency.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON R. BELLINGER whose telephone number is (571)272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason R Bellinger/  
Primary Examiner  
Art Unit 3617